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## **ABSTRACT**

Method and apparatus for improving data transmission in a digital subscriber line (DSL) system. The transmitter determines whether a spectrum of an inverse Fourier transform (IFT) is periodic with respect to a clock of a predetermined standard-size IFT and communicates this information to the receiver. Based on this information, the receiver adapts the FT if desired. In effect, the receiver adapts its signal processing algorithms to process the received signal in accordance with the transmitter's IFT size. In this manner, transmission performance is improved.